WHAT IS CLAIMED IS:

1. An information outputting apparatus comprising:

an extracting means for extracting a program clock reference and a transport packet from an input stream;

a clock generating means for generating a clock signal synchronized with said program clock reference extracted by said extracting means;

a time-stamp generating means for generating a time stamp in synchronization with said clock signal generated by said clock generating means; and

an information generating means for generating information representing continuity of time stamps.

2. An information outputting apparatus according to claim 1, wherein an adding means for adding a time stamp generated by said time-stamp generating means and information generated by said information generating means to a transport packet extracted by said extracting means.

3. An information outputting apparatus according to claim 1, wherein a file recording means for recording a time stamp generated by said time-stamp generating means and information generated by said information generating means into a playback management file.

4. An information outputting method comprising the steps of:

an extracting step for extracting a program clock reference and a transport packet from an input stream;

a clock generating step for generating a clock signal synchronized with said program clock reference extracted at said extracting step;

a time-stamp generating step for generating a time stamp in synchronization with said clock signal generated at said clock generating step; and

an information generating step for generating information representing continuity of time stamps.

5. A presentation medium used for presenting a program executable by a computer to drive an information outputting apparatus to carry out the steps of:

an extracting step for extracting a program clock reference and a transport packet from an input stream;

a clock generating step for generating a clock signal synchronized with said program clock reference extracted at said extracting step;

a time-stamp generating step for generating a time stamp in synchronization with said clock signal generated at said clock generating step; and

an information generating step for generating information representing continuity of time stamps.

6. An information outputting apparatus comprising:

a selecting means for selecting one of a plurality

of streams; and

a rewriting means which is used for rewriting information representing continuity of time stamps when one of plural streams is selected by said selecting means.

7. An information outputting method comprising the steps of:

a selecting step of selecting one of a plurality of streams; and

a rewriting step which is executed to rewrite information representing continuity of time stamps when one of plural streams is selected at said selecting step.

8. A presentation medium used for presenting a program executable by a computer to drive an information outputting apparatus to carry out the steps of:

a selecting step of selecting one of a plurality of streams; and

a rewriting step which is executed to rewrite information representing continuity of time stamps when a stream is selected at said selecting step.

9. An information outputting apparatus comprising:

a separating means for separating information representing continuity of time stamps, a time stamp and a transport packet;

a generating means for generating a timing signal;

a comparing means for comparing a timing signal

generated by said generating means with a time stamp separated by said separating means;

an output control means for controlling an operation to output a transport packet separated by said separating means in accordance with a result of comparison output by said comparing means; and

a timing control means for controlling a timing signal generated by said generating means on the basis of information representing continuity of time stamps and a time stamp.

10. An information outputting apparatus according to claim 9, wherein said separating means separates said information representing continuity of time stamps from an input stream.

11. An information outputting apparatus according to claim 9, wherein said separating means separates said information representing continuity of time stamps from a playback management file.

12. An information outputting method comprising the steps of:

a separating step of separating information representing continuity of time stamps, a time stamp and a transport packet;

a generating step for generating a timing signal;

a comparing step for comparing a timing signal

generated at said generating step with a time stamp separated at said separating step;

an output control step for controlling an operation to output a transport packet separated at said separating step in accordance with a result of comparison output at said comparing step; and

a timing control step of controlling a timing signal generated at said generating step on the basis of information representing continuity of time stamps and a time stamp.

13. A presentation medium used for presenting a program executable by a computer to drive an information outputting apparatus to carry out the steps of:

a separating step of separating information representing continuity of time stamps, a time stamp and a transport packet;

a generating step of generating a timing signal;

a comparing step of comparing a timing signal generated at said generating step with a time stamp separated at said separating step;

an output control step of controlling an operation to output a transport packet separated at said separating step in accordance with a result of comparison output at said comparing step; and

a timing control step of controlling a timing

signal generated at said generating step on the basis of information representing continuity of time stamps and a time stamp.

14. A recording medium for recording a plurality of connected streams, wherein an area is provided for recording information on discontinuity of time stamps at junctions between said streams.